IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **Collings III, John** Serial No. **09/858,403** Filed: **05/16/2001** For: **"Event Notification System"**	Group Art Unit: **2142** Examiner: **VU, Thong H.** Customer Number: **25854**

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

August 18, 2006

Sir,

Pursuant to 37 C.F.R. 1.192, in view of the Notice of Appeal filed on April 11, 2006, Applicant submits its Appeal Brief according to the following Table of Contents:

REAL PARTY IN INTEREST

The real party in interest in the present application and Appeal is: Mission Communications, LLC, 3060C Business Park Drive, Norcross, GA 30071.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 2-26 remain in the application and are all pending. Claims 2-26 stand rejected in a fourth Office Action under 35 U.S.C. 103(a) as obvious over Brewster et al. [5,960,337] in view of Marrs et al [5,504,476].

STATUS OF AMENDMENTS

No amendment has been filed since the Final Rejection of the last Office Action.

SUMMARY OF INVENTION

In summary, the invention is a Supervisory Control and Data Acquisition (SCADA) system used to monitor industrial processes. One of Applicant's commercial embodiments of the invention is a SCADA system used to monitor large scale waste water treatment systems, such as systems operated by a municipality.

The currently-pending claims are directed to a computerized method for managing responders (such as technicians) to emergency situations (such as power failures at a water treatment pumping station operated by a water utility). When an event (such as a pump failure) occurs, a central computer transmits an event code, via a non-automatically receipt confirmed transmission medium (for example, a pager) to a first individual. If the central computer receives a response from the first individual, then a request to respond with the event code is sent from the central computer to the first individual. If the first individual responds by transmitting

the first event code (which indicates that the first individual is responding to the event), then the central computer identifies the event from the event code and transmits instructions relating to the event to the first individual. The central computer also transmits the event code to a second individual (such as a backup technician) and a similar transmission-response routine is executed. If the central computer receives the response from the first individual, then it transmits an indication to the second individual that he or she is not required to respond to the event.

The central computer also tracks such information as which individuals are on duty, which individuals are nearest to the location of the event. The central computer selects the first individual and the second individual based on who is able to respond the quickest.

The central computer also provides instructions to the individual as to how to respond to the event. This allows the central computer to log who is responsible for responding to the event. Also, given that certain events are triggered by preceding events (for example, a power failure at a pumping station can trigger a wet well overflow) sometimes at different locations, the system facilitates an individual accepting responsibility for both the triggering event and the resulting event.

In the power failure—wet well overflow example, the power failure of an electric power note at one location might cause a pump that pumps waste water from a wet well at a different location to cease pumping, causing the wet well to overflow. If an electrician is dispatched to the electric power node were to fix the problem, then the pump will start working again and it would be an inefficient allocation of resources to dispatch a pump technician to the location of the wet well. This can be critical in situations such as when the power failure was caused by a storm and many failures occur nearly simultaneously. By dispatching technicians at the critical points where they are needed, the system ensures that assignments of technicians are optimal.

Exhibits A and B, attached hereto *supra*, demonstrate the acceptance of the invention in the marketplace and further demonstrate the long-felt, unsolved-need that the invention overcomes.

ISSUES PRESENTED

The following issues are presented for the Board's consideration:

1. Does the combination of references cited in the §103(a) rejection fail to render the rejected claims obvious?
2. Is it proper to base a rejection of a large group of dependent claims solely on the grounds that the dependant claims "contain similar limitations set forth in" the independent claim from which they depend and, therefore, reject the claims based on the same rationale set forth with respect to the rejection of the independent claim *without providing any specific guidance where the limitations of the rejected dependent claims may be found in the cited references*?

GROUPING OF CLAIMS

Applicant submits that all of the pending claims comprise a single group. Specifically, Claims 2-26 are all directed to a method. Claim 6 is an independent claim and Claims 2-5 and 7-26 are all dependant claims depending either from Claim 6 or intervening claims.

ARGUMENT

A. SUMMARY OF ARGUMENTS.

This section summarizes Applicant's arguments, according to the format of 37 CFR § 1.192 (c)(8)(iv). A more detailed argument and citation to authority is found below.

1. The final Office Action fails to demonstrate that a combination of the cited references teaches or suggests each of the elements of the rejected claims.
2. The rejections of the dependant claims are improper in that they completely lack guidance as to where the claim limitations may be found in the cited references.

B. DETAILED ARGUMENTS AND CITATIONS TO AUTHORITY.

1. BACKGROUND

A first Office Action was issued on September 2, 2004, in which the Examiner rejected

all of the claims, but indicated that Claim 6 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. Applicant responded to this action by canceling Claims 1 and 26-65, amending Claim 6 to include the limitations of Claim 1 and amending all of the remaining claims to depend from amended Claim 6.

A second Office Action was issued on May 23, 2005. Rather than allowing the claims, all of the claims were rejected under 35 U.S.C. §§ 101, 112 and 103 (citing U.S. Patent Nos. 6,571,285 and 5,566,339). Applicant responded to the § 101 rejection by presenting arguments as to why the rejection was improper and responded to the § 112 rejection by amending the claims slightly and also presenting arguments as to why the rejection was improper. Applicant responded to the § 103 rejection by distinguishing the elements of the claims from the passages cited in the Action.

A third Office Action was issued October 3, 2005, in which all of Applicant's arguments presented in the Response to the second Office Action were asserted to be moot in view of new grounds for rejection. All of the claims were, once again, rejected. It appears as though the Examiner accepted all of Applicant's arguments regarding the §§ 101 and 112 rejections. This time, however, Claim 6 was rejected under 35 U.S.C. § 112 on the previously-unasserted grounds that it contained a negative limitation. All of the claims were rejected under 35 U.S.C. § 103 as being obvious over U.S. Patent No. 6,647,432, in view of U.S. Patent No. 5,566,339. Applicant responded to the § 112 rejection by pointing out that Claim 6 did not include a negative limitation and, even if it did, that there is no prohibition on negative limitations. Applicant responded to § 103 rejection by pointing out that the cited references completely fail to show any of the limitations recited in the corresponding claims.

A fourth Office Action was issued on February 15, 2005, in which all of Applicant's arguments presented in the Response to the third Office Action were, once again, asserted to be moot in view of still new grounds for rejection. It appears as though the Examiner accepted Applicant's arguments regarding the new § 112 rejection. However, all of the claims were rejected yet another time under 35 U.S.C. § 103 as being obvious over U.S. Patent No. 5,960,337

in view of U.S. Patent No. 5,504,476.

Because of the excessive cost associated with responding to what is beginning to appear to be an endless chain of office actions, Applicant filed the Notice of Appeal in response to the fourth Office Action.

2. CLAIM REJECTIONS UNDER 35 U.S.C. §103:

a. The fourth Office Action fails to demonstrate that a combination of the cited references teaches or suggests each of the elements of Independent Claim 6.

"To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." MPEP 2143.03 The fourth Office Action rejects Claims 2-27 under 35 U.S.C. §103(a). However, the cited references fail to teach or suggest each of the limitations of the rejected claims. In fact, virtually none of the limitations of Claim 6 (or any of the claims depending therefrom) are found in the cited references. Claim 6 includes eight different elements, which will be discussed in detail, in view of the cited references as follows:

First Element (Element a) of Claim 6

For example, the first element of Claim 6 recites the following limitations:

> transmitting from a central computer at a central notification processing center to a first individual, via a not-automatically receipt confirmed transmission medium, a first data packet that includes a first event code, the first event code corresponding to a first event;

The fourth Action asserts that Brewster et al. discloses the limitation of "transmitting from a central computer at a central notification processing center to a first individual, via a not-automatically receipt confirmed transmission medium," stating that "an EAS operator transmits an emergency call to available EAS responder/technician," without citing any portion of the '337 patent in support thereof. However, Brewster et al. simply does not disclose this element for the following reasons:

1. Brewster et al. completely fails to disclose use of "a not-automatically receipt

confirmed transmission medium," or any equivalent thereof;

2. Brewster et al. completely fails to disclose transmission by a central computer of an event code that corresponds to an event.

The not-automatically receipt confirmed transmission medium is disclosed, for example, on p. 8, ll. 13-26 of the present application and has definite meaning. Because the present invention uses such a medium, it is capable of sending out response assignments to technicians while placing a positive duty on the technician to take an action that indicates that the event is being responded to. This limitation provides a higher level of reliability to the present invention.

Second Element (Element b) of Claim 6

The second element of Claim 6 recites the following limitations:

> upon receiving, by the central computer, a response communication from the first individual, transmitting a request from the central computer to the first individual requesting that the first individual respond with the first event code;

The fourth Action asserts that Brewster et al. discloses this element, indicating that in Brewster et al. "the emergency call broadcasted to the candidate EAS responders which are available to respond to the emergency/incident categories, Fig 3A-D." However, an event code, which is discussed in the Specification of the present application on p. 8, ll. 13-26, provides information about a specific event, not just a general category of events, and is directed to a specific individual. For example, if a pump experienced a power failure on one night and the same pump experienced a power failure on another night, each of these separate events would generate a different event code. Also, if two different technicians were notified of the same power failure, two different event codes would be generated. In this way, the central computer is able to identify exactly which technician is responding to exactly which event. Furthermore, the cited figures (Figs. 3A-D) merely show the various groupings of types of responders are required for different types of emergencies. Nothing in the rest of Brewster et al. shows this limitation either.

The fourth Action states, on p. 3, that Brewster et al. discloses use of a first code and second code (citing col. 10, ll. 44-68). However, the cited passage of Brewster et al. refers only

to codes generated by a global positioning system (GPS) satellite that are used by a GPS system to determine a location. They do not relate to the event codes of the present invention in any way.

The fourth Action also states, on p. 4, that Marrs et al. discloses event codes. Marrs et al. discloses only "alert codes" that identify the type of message content (e.g., sports, etc.) that a radio receiver (such as a pager) is receiving [*see*, *e.g.*, Marrs et al., col. 3, ll. 6-33]. Such "alert codes" do not relate in any way to the event codes of the present application.

Third Element (Element c) of Claim 6

The third element of Claim 6 recites:

> if the first individual responds by transmitting to the central computer the first event code, then identifying the first event from the first event code;

The fourth Action asserts that in Brewster et al. "if the first individual responds by transmitting the first event code then identifying the event from the first event codes (i.e.: the first EAS responder responds to the call)." However, an EAS responder responding to a call, is not even similar to the recited action of an individual transmitting an event code to a central computer and the central computer identifying the event based on an event code. Brewster et al. makes no mention at all of a responder transmitting an event code to a central computer.

Fourth Element (Element d) of Claim 6

The fourth element of Claim 6 recites:

> transmitting from the central computer instructions relating to the event to the first individual;

The fourth Action asserts that Brewster et al. discloses "the EAS operator contact to the first ESA responders who accept the call (without providing a specific cite in Brewster). However, even if Brewster et al. discloses what the Action asserts, it is still not disclosing the step of transmitting instructions from a central computer, as recited in this element.

Fifth Element (Element e) of Claim 6

The fifth element of Claim 6 recites:

> transmitting from the central computer to a second individual, via a not-automatically receipt confirmed transmission medium, a second data packet that includes a second event code, the second event code corresponding to the first event;

The fourth Action asserts that Brewster et al. discloses "transmitting from the central computer to a second individual, (i.e.: the EAS operator assigned the call to an other/second EAS responder)."

Even if Brewster et al. does disclose everything that the action asserts relative to this element, it is completely irrelevant as the action fails to state that Brewster et al. discloses the actual claim limitations recited in this element. The fifth element recites transmitting from a central computer a data packet that contains an event code – which does not relate at all to an operator assigning a call to an EAS responder.

Sixth Element (Element f) of Claim 6

The sixth element of Claim 6 recites:

> upon the central computer receiving a response communication from the second individual, transmitting a request from the central computer to the second individual requesting that the second individual respond with the second event code;

The fourth Action asserts that Brewster et al. discloses "the second EAS responders received and responded to the call." Again, what the Action asserts is disclosed by Brewster et al. simply does not relate to the limitations recited in the element. Furthermore, the limitations recited in the element are simply not disclosed in Brewster.

Seventh Element (Element g) of Claim 6

The seventh element of Claim 6 recites:

> identifying with the central computer the first event and the second individual from the second event code;

The fourth Action asserts that Brewster et al. discloses "the EAS subsequently monitors the location of the EAS responders." Again, while Brewster et al. may disclose what the Action asserts, it simply does not relate to the limitations of the recited element.

Eighth Element (Element h) of Claim 6

The eighth element of Claim 6 recites:

> if the step of transmitting instructions relating to the first event to the first individual has been completed prior to the central computer receiving a response communication from the second individual, then transmitting from the central computer to the second individual an indication that the second individual is not required to respond to the first event.

The fourth Action asserts that Brewster et al. discloses "the EAS operator will assign only one responder is required for this incident" and then cites eight full columns of Brewster et al. in support thereof. However, the recited limitations essentially indicate that the computer will recall a second responder once a first responder has accepted responsibility for an event. Nothing that the Action asserts about this element relates to recalling a second responder. In fact, Brewster et al. makes no mention at all of recalling a previously-assigned responder once a first responder has taken responsibility for an event.

As can be seen regarding the rejection to Claim 6, not a single one of the claims eight elements is either taught or suggested by the cited references, either taken alone or in combination. For this reason, Claim 6 and all claims depending therefrom are not obvious over the cited references and should be allowed.

b. The fourth Office Action fails to indicate where the limitations of the dependant claims my be found in the cited references.

The fourth Action also rejects all of dependant Claims 2-5 and 7-26 on the grounds that these claims "contain the similar limitations set forth in claim 6. Therefore claims 2-5, 7-26 are rejected for the same rationale set forth in claim 6."

Firstly, Applicant traverses the assertion that the limitations recited in Claims 2-5 and 7-26 are the same as set forth in Claim 6. If that were true, then the proper assertion would be a Duplicate Claims objection pursuant to MPEP 706.03(k) – which was never asserted in any of

the four Office Actions issued in this case.

Secondly, a reading of these claims clearly shows that they all have limitations distinguishable from those of Claim 6. However, the Action failed to include any sort of comparison of the rejected claims to the cited references on an element-by-element basis. (In fact, it failed to provide any guidance as to the basis for the rejection at all!).

Thirdly, a blanket rejection of this sort is so imprecise that it makes it impossible for Applicant to understand the Examiner's rationale in making the rejection and, thus, nearly equally impossible to respond.

Finally, Applicant asserts that the limitations of the dependant claims are not taught or suggested in the cited references. Specifically, nowhere do the cited references teach or suggest the elements of: "using [a] central computer to identify the first individual from the first event code," as recited in Claim 2; "using the central computer to identify the first individual from a caller identification data packet received from a telephone," as recited in Claim 3; "the first event compris[ing] an alarm at a selected location," as recited in Claim 4; " using the central computer to maintain a record of the telephone call received from the first individual," as recited in Claim 5; "the instructions include[ing] directions to a location of the first event," as recited in Claim 7; "selecting, using the central computer, the first individual from a plurality of individuals based upon a preselected set of criteria," as recited in Claim 8; "wherein the preselected set of criteria include at least one of the following: who of the plurality of individuals is currently on duty; who of the plurality of individuals is closest to a location of the first event; who of the plurality of individuals is currently not assigned to another event; and who of the plurality of individuals is most capable of responding to the first event," as recited in Claim 9; "transmitting from the central computer to a local computer at a local facility an indication that the first event has occurred," as recited in Claim 10; "displaying information relating to the first event on a site accessible to a user via a global computer network," as recited in Claim 11; "wherein the information includes a graphical display of a location of the first event," as recited in Claim 12; "wherein the information includes a graphical display of a nature of the first event,"

as recited in Claim 13; "wherein the information includes a graphical display of a current location of the first individual," as recited in Claim 14; "employing the central computer to verify that the first individual has responded to the first event by reading a personal identification of the first individual," as recited in Claim 15; "the verifying step comprising the step of reading a personal identification apparatus at a location of the first event and transmitting data resulting from the reading of the personal identification apparatus to the central computer," as recited in Claim 16; "the verifying step comprising the step of reading biometric data at a location of the first event and transmitting data resulting from the reading of biometric data to the central computer," as recited in Claim 17; "activating a service mode upon completion of the verifying step, wherein the first event occurs at a first location and wherein the service mode causes a preselected set of subsequent events occurring at the first location to be ignored by the central computer," as recited in Claim 18; "activating a service mode upon completion of the verifying step, wherein the first event occurs at a first location and wherein the service mode causes a preselected set of pending events occurring at the first location to be ignored by the central computer," as recited in Claim 19; "instructing the first individual to follow a procedure to indicate acceptance of responsibility for the first event to the central computer," as recited in Claim 20; "the procedure compris[ing] depressing a preselected button on a telephone handset," as recited in Claim 21; "the transmitting step comprising the step of transmitting from the central computer a description of the first event to the first individual," as recited in Claim 22; "the transmitting step comprising the step of transmitting from the central computer at least one instruction to the first individual as to how the first individual is to respond to the first event," as recited in Claim 23; "a plurality of events occur[ing] at a location and wherein if the first individual responds to the fist event then the central computer recognizes that the first individual accepts responsibility for each of the events of the plurality of events," as recited in Claim 24; "wherein a plurality of events occuring at a location, further comprising the step of allowing the first individual to selectively accept responsibility for each of the events of the plurality of events," as recited in Claim 25; and "wherein the first event occurs at a first location and wherein

at least one second event is triggered by the first event, further comprising the step of receiving acceptance by the central computer for the second event when the first individual indicates acceptance for the first event," as recited in Claim 26.

Given that all of these limitations are completely absent from the cited references, and give that the Action makes no *specific* assertion to the contrary, Applicant believes that these claims should be allowed. Otherwise, Applicant respectfully requests specific cites to where these limitations can be found in the cited references.

C. REQUEST FOR DECISION ON APPEAL MANDATING AN IMMEDIATE ALLOWANCE RATHER THAN CONTINUATION OF EXAMINATION

Given that four separate Office Actions have been issued in the present application, without a single one issuing a rejection that has been maintained in a subsequent action and given that each action has based its rejections on references not cited in the previous action, it appears as though the present application has been subject to four separate searches. Also given that no substantive rejection has been maintained from action to action, it is believed that that the claims of the present application have been thoroughly examined and are ready for allowance.

If the Board were not to mandate the issuance of a Notice of Allowance, it would only waste the resources of the Office and the Applicant. Therefore, Applicant respectfully requests a Decision on Appeal that mandates the immediate issuance of a Notice of Allowance.

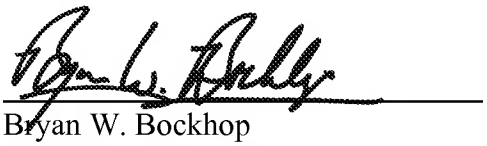
In the alternative, Applicant requests a Decision on Appeal that mandates the Examiner provide a specific cite, for each limitation in the claims, to a location in the cited references where the limitation may be found. (Applicant respectfully suggests that each site should be to no more than three lines in the cited reference.)

CONCLUSION

For the reasons enumerated above, Applicant believes that the examination was in error and requests that all rejections be reversed and that all remaining claims be allowed.

No addition fees are believed due. However, the Commissioner is hereby authorized to charge any additional fees which may be required, including any necessary extensions of time, which are hereby requested, to Deposit Account No. 503535.

08/18/2006
Date



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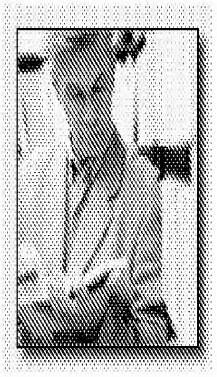
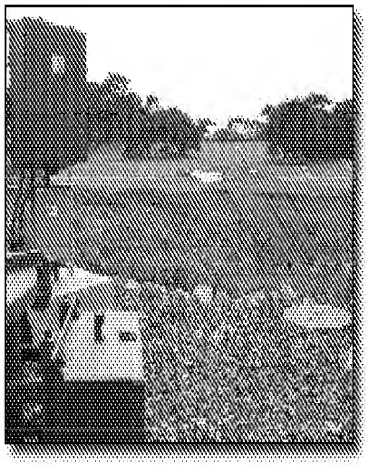


MISSION interviewed several of its customers about the problems they had before they installed their units, and what additional benefits they encountered after installation.

Pebble Beach Uses *MISSION* for Backup Monitoring of an Existing SCADA System

Most people, not just golfers, recognize the name Pebble Beach as being one of the premier residential communities in the nation. Nestled on the shoreline and bluffs of the California Monterey peninsula, Pebble Beach is home to hundreds of multi-million dollar estates and some of the most meticulously maintained golf courses in the world. One course, the Pebble Beach golf links, hosts the annual Pebble Beach Pro/Am golf tournament. With such high profile residents and guests enjoying the panoramic vistas of the Pacific and mountains, imagine the environmental and economic losses, not to mention the political uproar, if a sewer spill occurred. The management of the Pebble Beach Community Services District does, as it has demonstrated by maintaining a long-standing record of pump station reliability. However, after a number of recurring communication failures with their phone line based SCADA system, they decided it was time to improve the monitoring reliability of their system.



Customer Profile

- 1.2 MGD system
- 8 lift stations
- 1 "Interceptor" Flow Monitor
- 1 Tank Level Monitor

Situation

- Environmentally, economically and politically sensitive sites
- Cut phone lines and slowing repair service
- Alarms not reported
- "Zero tolerance" EPA and District

"From management to the field operators, our District's fiduciary responsibilities concerning collection system operation are the same as any other sewer operators. If we ever had a spill in our service area, the 'beheadings' might be a little more public and spectacular than others, but the result will be the same for any unprepared operator. The Federal and State EPA mandates are quite clear, no spills. Those kind of press conferences are unacceptable to our board members," says Frank Rose, District Maintenance Manager for the Pebble Beach Community Services District. With construction mishaps, fiber upgrades and normal maintenance, more and more "copper" phone line services (dedicated or dial-up) are subject to interruptions. Add in the economizing that most local telephone companies are being forced into, and hour-long problems are turning into days. Couple this with a "zero tolerance" by District managers and the EPA, and redundancy starts to become standard operating procedure.

"Our initial logic was pretty straight forward. We have 2 or more pumps at every lift station for redundancy. We all know that any machine (or

Exhibit A

- Up front high costs and integration problems with backup system
- Ugly, visible YAGI antennas and masts

Result

"It's a little embarrassing. We bought MISSION as a backup to our existing SCADA. In many areas it out performs the primary system. It's certainly a heck of a lot less expensive and easier to use."

system) can break for a variety of reasons. Why not extend that type of safeguard to the monitoring and control system." But at what cost?

The district looked at the feasibility for both licensed and unlicensed (spread spectrum) radio based SCADA monitoring systems. The upfront costs were high and integration of the two systems appeared difficult. Additionally, through conversations with other radio based SCADA users, questions arose about the true reliability and ongoing maintenance issues of such a system. "There were a number of times we felt we would be creating more problems than we'd be solving," says Rose. "The final straw was the anticipated resident reactions to YAGI antennas and their pole masts sticking up in the air at the lift stations on the golf courses; it just wasn't going to fly."

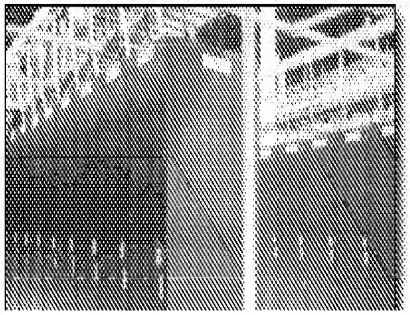
A few months later the District was given a demonstration of the MISSION Communications cellular based SCADA/monitoring system by Dave Nemiroff of Nemiroff, Monahan & Associates, a consulting engineer to the District. "I had read about the MISSION system in trade magazines, but because of the low price and my prior experiences with cellular, I really didn't think the system would meet our expectations. But my customer seemed to be at an impasse, so I arranged a demo" says Nimeroff. "We were down right amazed at the capabilities and simplicity of the system. If it worked as advertised, we felt we had a solution," says Nemiroff. A trial installation was agreed to.

Wireless Data Over the Public Cellular Network

MISSION's system uses a special cellular data technology called Cellemetry, which was invented by BellSouth. Carriers normally use cellular digital control channels to send call setup and billing data. MISSION uses these channels to send RTU alarms, tests, and other supervisory information. All this is done over the highly reliable cellular infrastructure, but without actually making a phone call, and thus is not subject to busy signals or dropped calls. Cellemetry technology has been used in the burglary and fire alarm industry since 1997, and they have deployed over 150,000 devices using this technology.

Frank remembers asking, "Well, if it doesn't make a phone call, then how do I get my alarms and lift station status information? I figured they were going to require us to buy a central SCADA computer. Then I thought, great, now we have two systems to maintain." However, with MISSION you don't need a separate SCADA computer. MISSION uses a large computer facility in Atlanta to present data and SCADA screens to the user over a secure Internet link to the customers existing computers. Within a second or two after the field RTU transmits the alarm, the data reaches MISSION's central computer facility in Atlanta. From there the alarms are automatically forwarded to the customer's on-duty personnel. Automated computers can deliver notifications to phones, cell phones, numeric pagers, alphanumeric pagers, faxes or e-mail addresses for any number of recipients on a call-out list. The MISSION alarm and supervisory data can even be fed seamlessly into existing open architecture SCADA computers such as Wonderware, Intellution or Rockwell Automation RS View.

"As fast as you can dial a long distance number and hear it ring at the other end is as fast as we get these signals; nationwide. The best news is that the service will be around as long as cellular, and the cellular carriers maintain the radio towers and equipment. We just ride along on the data backbone of the multi-billion dollar cellular network," says John Collings, President of MISSION Communications.



"Once we have received the data, robotic operators at your

Exhibit A

disposal to get in touch with on-duty personnel any way you like. The computers never get tired and they don't forget."

The initial trial unit in Pebble Beach was installed on a submersible duplex pump station housed in an underground vault. The MISSION system monitors AC failure, high level, low level, phase loss (through a phase monitor) and two pump runtimes. The RTU was installed with a MISSION-supplied low profile, attack resistant, antenna. This was done to respect the District's desire to minimize public exposure to any antennas. "After the unit was first installed, we got a phone call from MISSION's Technical Support Group. They had detected through their diagnostics that the trial unit had poor cellular signal strength and was occasionally going off-line," says Nemiroff. "I decided to look at the installation in depth and found that the installer had taken the District's instructions on "hidden from view" antennas a little far. The antenna had actually been mounted below ground in the lift station access vault. I was surprised the RTU worked at all -- it was like trying to use a cell phone from a sub basement elevator."

Flow Monitoring and Tank Levels

After the initial confusion over antenna placement, the trial went smoothly and the District subsequently installed RTU's on all eight of its lift stations. Soon thereafter, the District ordered more RTU's to monitor the flow to the wastewater interceptor line, and to monitor levels at their water storage tank. "We were extremely pleased with the system's performance so we started to take advantage of some of the other capabilities it offered," says Rose.

"It's a little embarrassing [redacted] says Rose.

Other early adopters in the Monterey area are the Monterey Regional Water Pollution Control Agency and Carmel Area Wastewater District. MISSION is based in Atlanta, Georgia, and introduced its products and services to the water and wastewater industry in early 2000. MISSION has units throughout North America from Vancouver, BC to Miami, FL to International Falls, MN. Information about MISSION and its products can be found on the web at www.123mc.com.

Exhibit A

MISSION

SCADA Made Simple™
1-877-993-1911

Username:
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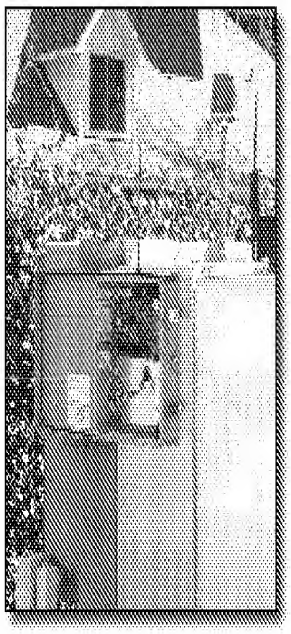
Case Studies

MISSION interviewed several of its customers about the problems they had before they installed their units, and what additional benefits they encountered after installation.

Landis Sewerage Authority Lift Station Monitoring

Landis Sewerage Authority (LSA) serves the greater Vineland, New Jersey area. LSA was facing some typical problems monitoring their 23 lift stations. "Phone line problems with our autodialers were increasing almost as fast as Ma Bell's prices," says Sam Hess, Collection System Plant Manager for the 8.2 MGD authority. "Additionally, every Wednesday when we would test our stand-by generators, which tripped the autodialers, our on call people would be swamped with phone calls. I thought our operations secretary was going to quit!"



Profile
- 8.2 MGD system
- 23 Lift Stations

Situation
- False Alarms
- Cost of Phone Lines
- Alarms not reported
- EPA Reporting
- Site Security
- Pump Performance

Result
"We originally cost justified the MISSION system on phone line savings alone (all the autodialer lines are now removed). But if you take into account the man-hours the system saves us for the additional services it performs, I'd say the system actually pays for itself. Essentially monitoring for free," says Sam Hess, Collection System Plant Manager

About two years ago LSA saw a demonstration of a wireless monitoring system by MISSION Communications of Atlanta, Georgia. MISSION's system uses a special cellular data technology invented by BellSouth called Cellemetry. Instead of using regular voice channels, Cellemetry uses the more reliable cellular control channels that are normally used to send call setup and billing data. Since Cellemetry doesn't use the voice channels, it is not subject to busy signals or dropped calls, and it has wider coverage. The control channels are always on and work without actually making a phone call. MISSION uses these channels to send RTU alarms, tests, and other supervisory information.

MISSION management founded the first company to ever use the BellSouth technology in the burglary/fire alarm industry in 1996. It is estimated that the life/safety alarm industry alone has deployed over 150,000 devices using Cellemetry, and relies on the control channel signaling technology because of its many advantages over phone lines and regular voice cellular.

Clark Stump, Process Control Manager for LSA remembers asking, "Well, if it doesn't make a phone call, then how do I get my alarms? I figured they were going to require us to buy a central SCADA computer. Then I

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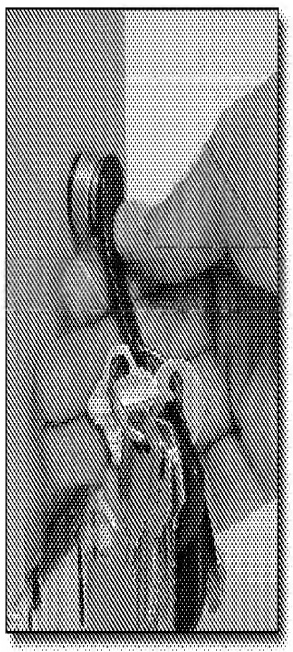
thought, there goes the budget." He discovered that with MISSION, a central computer or SCADA software is not required. MISSION has its own computer facility and software in Atlanta which all customers share. Each customer is provided with a secure web site where they access their data, reports and SCADA screens.

About one second after MISSION's field RTU transmits the alarm or supervisory information over the control channel to the nearest cellular tower, the data packet reaches MISSION's central computers. "As fast as you can dial a long distance number and hear it ring at the other end is as fast as we get these alarms nationwide", says John Collings, President of MISSION Communications. In a fraction of a second, MISSION's computer facility converts the cellular data bytes into a text or voice message, then relays it to the customer's on duty personnel. MISSION can deliver alarm messages to regular or cellular telephones, numeric or alphanumeric pagers, can send a fax or email, or notify via the customer's web site. The system can call any number of recipients on a typical call-out list, and the list can change by time of day or day of week. "Once we have these signals, imagine having a room full of robotic operators at your disposal to get in touch with on-duty personnel any way you like. The computers never get tired and they don't forget," says Collings. Each alarm requires that one of the recipients acknowledge the alarm, otherwise additional notifications are made.

Reduced False Alarms, Increased Reliability and Documents Inspections

Since the call-out list can be changed by time of day or day of week, MISSION set up LSA's system so the Wednesday stand-by generator tests were emailed to LSA, while all other alarms, or generators running at other times, were processed as full alarms with call-out. "I got my Wednesday mornings back!" says Margaret Miller, operations secretary at LSA.

All MISSION field RTU's have electronic key readers installed on them. LSA personnel were issued small electronic keys that are weatherproof and fit easily on their key rings. The keys uniquely identify each key holder and can be used on any field RTU. Whenever anyone inspects or performs maintenance at a field station, they simply touch their key to the MISSION RTU key reader. That puts the RTU in "service mode" which automatically stops alarm notifications. It also sends a message to MISSION logging who checked in at the station and the time. When field technicians "keys out" and leave, the RTU is put back online and another message logs the time they completed the service. If they forget to "key out", the RTU will automatically bring itself back online an hour later. "We get fewer false alarms, better system reliability, a report we can use for the State EPA documenting when we performed maintenance and inspections, and documentation of how quickly we responded to any alarms," says Sam Hess.



Another problem the MISSION system solved was the accidental alarms generated when personnel performed maintenance on the sites. "The mechanics were supposed to turn off the autodialers when they were working at the stations. Either they wouldn't turn them off, causing false alarms, or they would turn them off and never turn the darn things back on, and we'd miss alarms. Of course, we could never prove this and nobody would ever admit to it," says Bill Quigley, LSA senior electrician.

Increased Security

In the aftermath of the recent terrorist attacks, everyone has an increased awareness of security at all levels of water and wastewater operations. MISSION and LSA are modifying the field RTU's so that the electronic key use will be used to authorize entry to pump stations. The key readers will be relocated on the outside of the stations and entry intrusion detection devices added. Field personnel will use the keys to disarm RTU intrusion inputs. "Though

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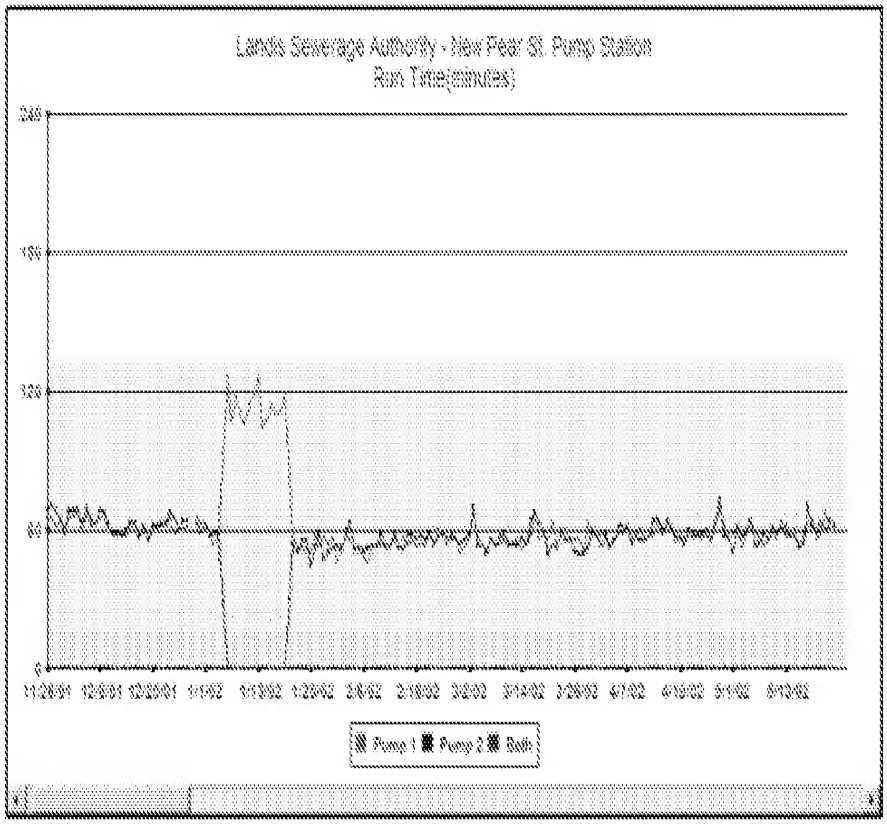
the MISSION system is not intended to be a burglar alarm, it is a natural extension of the systems abilities and it's easier to use than other alarm systems we've seen," says LSA.

System Monitors Pump Performance

Calling out alarms is just scratching the surface of what the MISSION system can do. Each night the system reports individual pump runtimes for the day, and it even keeps track of the time when pumps are running simultaneously. All the run times are logged and graphed on the customers web site for reference and trending.



To provide additional value, the pump run times are analyzed daily for variances. "We don't look for simple percentage changes in pump run times. We use complex statistical algorithms that take into account each pumps operational characteristics over a long period of time. When we see a change, we automatically notify the customer," says Collings. The pump run time variance alerts are sent via fax, email or pagers during work hours if problems are detected. "It would take us an hour or two every day to do what MISSION does. It has already alerted us to several cases of operator error, bad check valves, air bound pumps and broken controllers. That will definitely prolong the useful life of our pumps," says Quigley.

"We originally cost justified the MISSION system on phone line savings alone (all the autodialer lines are now removed) as MISSION's service price is much less expensive than a phone line. But says Hess.

Other early adopters in the New Jersey area are the Borough of Haddonfield, Egg Harbor and the City of Millville. MISSION is based in Atlanta, Georgia, and introduced its products and services to the water and wastewater

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industry in early 2000. MISSION has units throughout North America from Vancouver, BC to Miami, FL to International Falls, MN.

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